## NOTES ON SOME PARASITES OF SUGAR-CANE INSECTS IN JAVA, WITH DESCRIPTIONS OF NEW HYMEN-OPTERA CHALCIDOIDEA.\*

#### By A. A. GIRAULT.

Herr P. van der Goot, Entomologist of the Experiment Station of the Java Sugar-cane Industry at Pasoeroean, Java; was kind enough to send to me for identification a number of egg-parasites of sugar-cane insects upon part of which I report on in the following pages:

### 1. Gonatocerus bijasciativentris, new species.

Female.—Length, 1·20 mm. Black and golden yellow, and belonging to the group of species with graceful fore wings; the abdomen as in rivalis, the ovipositor exserted for a length equal to a third that of the abdomen. Funicle and club, the propodeum, cephalic third or less of mesoscutum, cephalic half of parapside (making two triangular spots on each side), a subquadrate spot at base of scutellum at the meson, immediate base of abdomen, the exserted valves of the ovipositor and a broad black band just distad of centre of abdomen, in the dorsal aspect, sometimes narrowly divided into two stripes, velvety black. Pedicel yellow, suffused with dusky, the scape yellow, dusky along dorsal and ventral edges. Mesopleurum black. Fore wings with about twenty-one lines of discal cilia where broadest, marginal vein long for the genus; posterior wings with a paired line of discal cilia along each margin. Funicle of antennæ with no globular joints, all longer than wide; 1 and 2 subequal, smallest; 3 somewhat longer, subequal to the pedicel; 4, 5 and 6 subequal, longest; 7 only slightly shorter than 6, while 8 shortens.

Fore wings fumated slightly along distal margin.

From many specimens,  $\frac{2}{3}$  = inch objective, 1 = inch optic, Bausch and Lomb.

Male.—The same, but the abdomen sometimes with three black stripes. Longest funicle joints nearly thrice their own width.

From eight specimens; the same magnification.

Though coloured somewhat like the Australian *cingulatus* and *comptei*, this species resembles in habitus *spinozai* and *bicolor* of Australia and *rivalis* of North America because of the more slender abdomen, the exserted ovipositor, and the absence of globate joints in the antennal funicle. But it is quite slender. Eight males and fifty-four females.

Habitat.—Java.

Host.—Eggs of a leaf-hopper embedded in the leaves of sugar-cane.

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Types.—In the Queensland Museum, Brisbane, one male, sixteen females, on a slide in xylol balsam.

## 2. Trichogramma minutum (Riley).

Four males, eleven females of this species reared from the eggs of Chilo infuscatellum, Sn.

A New Genus of Omphaline Eulophida.

Omphalini.

#### Parachrysocharis, new genus.

Female.—Like Chrysocharis, Foerster, but the post-marginal vein absent; antennæ slender, three funiele and club joints, third club joint terminating in a spur. Stigmal vein long. Thorax without grooves; the parapsidal furrows complete.

Male.—The same, but the funicle four-jointed, three club joints,

ten antennal joints. Antennæ clothed with long, fine hairs.

Type.—Parachrysocharis javensis, new species.

## 3. Parachrysocharis javensis, new species.

Female.—Length, 1.25 mm. Black, the base of the abdomen rather broadly, the ventral half of the thorax and the legs golden yellow; venation and antennæ dusky yellow; face also mostly golden yellow. Funicle joints all longer than wide, subequal and each barely longer than the pedicel; scape and pedicel paler.

From nine specimens; the same magnification.

Male.—The same.

From three specimens, the same magnification.

Described from three males, nine females, reared from leafhopper eggs on the leaves of sugar-cane, the host probably Flata affinis; each egg holds one parasite. The hosts turn black.

Habitat.—Java.

Host.—Flata affinis (teste P. van der Goot).

Types. -In the Queensland Museum, Brisbane, one male, two females on a slide in xylol balsam.

# 4. Cyrtogaster javensis, new species.

Female.—Length, 1.90 mm. Dark metallic blue, the scutum reflecting greenish, wings hyaline; legs white and the antennæ yellowish, the latter with three ring-joints, each longer than the one preceding; the funicle joints subquadrate and more or less subequal. Post-marginal vein distinctly longer than the long stigmal. Coxæ concolorous. Parapsidal furrows half complete from cephalad. Punctate, the propodeum reticulated, with a median carina. Abdomen slender. Five funicle, three club joints, the club wider than the cylindrical funicle. Mandibles four-dentate, the outer tooth acute. Scutellum smoother toward apex.

From ten specimens; the same magnification.

Male.—Not known.

Described from ten females reared from the eggs of an unknown moth on the leaves of sugar-cane.

Habitat.—Java.

Host.—Lepidopterous eggs (probably Bombycidæ).

Types.—In the Queensland Museum, Brisbane, three females on tags, three pins and a slide with two others.

Runs to the genus in Ashmead's (1904) table.

#### BRITISH ORTHOPTERA IN 1916.

By W. J. Lucas, B.A., F.E.S.

Most of the interesting facts connected with our limited orthopterous fauna, which came to hand in 1916, had relation to the earwigs—the abundance of L. minor and F. auricularia in one district, and the occurrence of the invader, P. arachidis in two others. Grasshoppers in the late summer seemed to be about in their usual numbers, and chirped merrily as if enjoying the bright sunshine of early August. Many examples, however, of various species were not mature in the New Forest by August 9th. How skilfully, after one of their flying leaps, grasshoppers land with unerring safety on a slender grass-stem or some similar object, when one walks amongst them on a fine summer's day.

Forficulodea.—Several notes, worthy of record were handed to me during 1916 in connection with the earwigs, although some of them refer to the previous year. Writing on March 11th Mr. O. Whittaker told me that when in camp with his regiment at Exning in Suffolk, not far from Newmarket, Labia minor, Linn., occurred very commonly during October and the end of September, 1915, the ground outside his tent often revealing the presence of at least three per square foot. He took two dozen in a couple of minutes one evening as he sat at tea, and still there were more. This was the first occasion on which he had seen the species at all plentifully—in fact, previously he had taken only a couple of single examples. My own captures have been single ones also, and perhaps not a dozen in all. Later Mr. Whittaker sent me nineteen of those he captured—six males and thirteen females.

Writing again on May 19th Mr. Whittaker said that on the 17th inst. he was at Bury St. Edmunds and at 5.30 p.m. there were dozens upon dozens of *Labia minor* on the wing. About halfway back to Newmarket the Red Cross car broke down, and he had to wait for an hour by the road side until another car came. It was a beautiful evening and still more